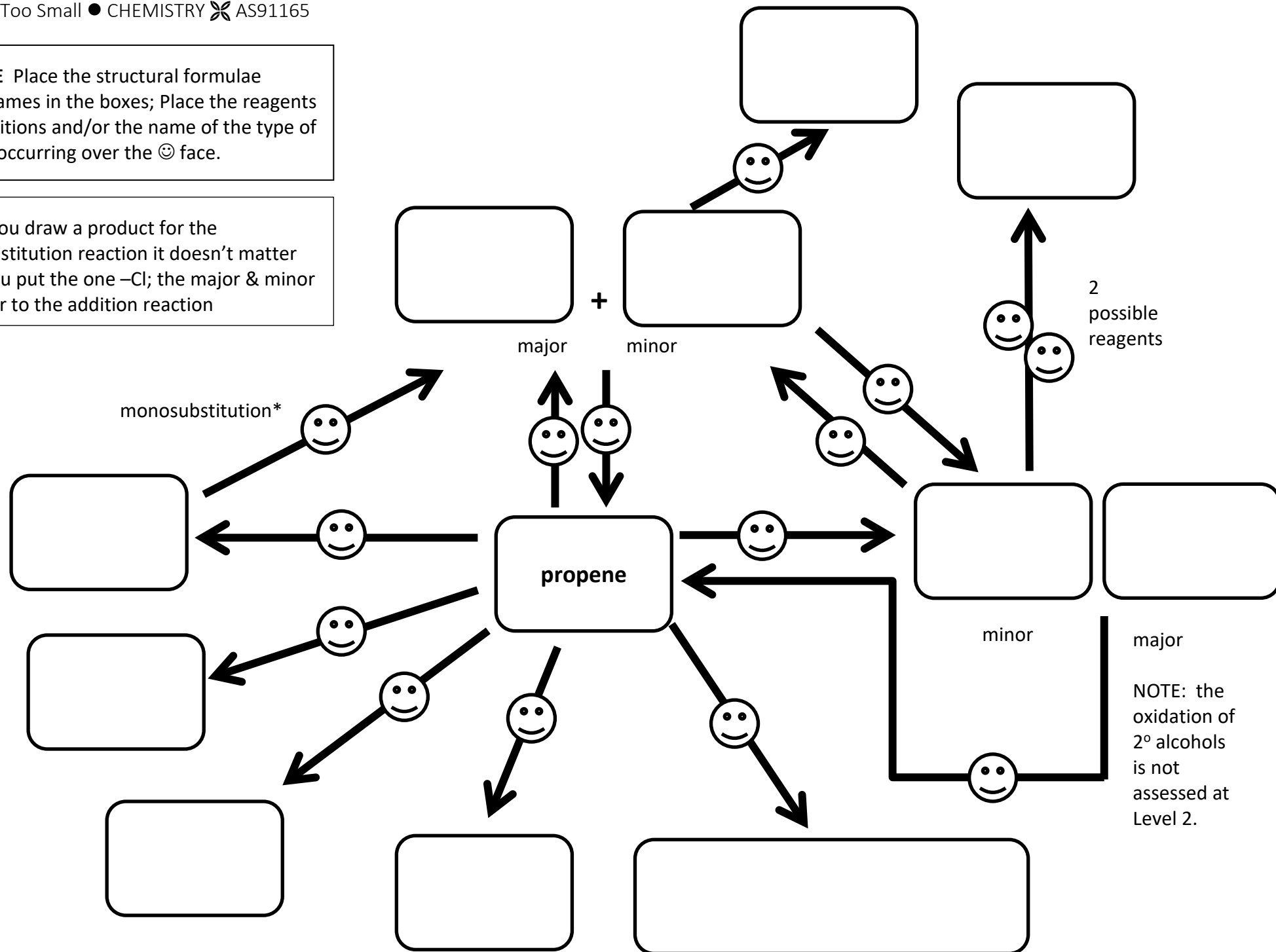
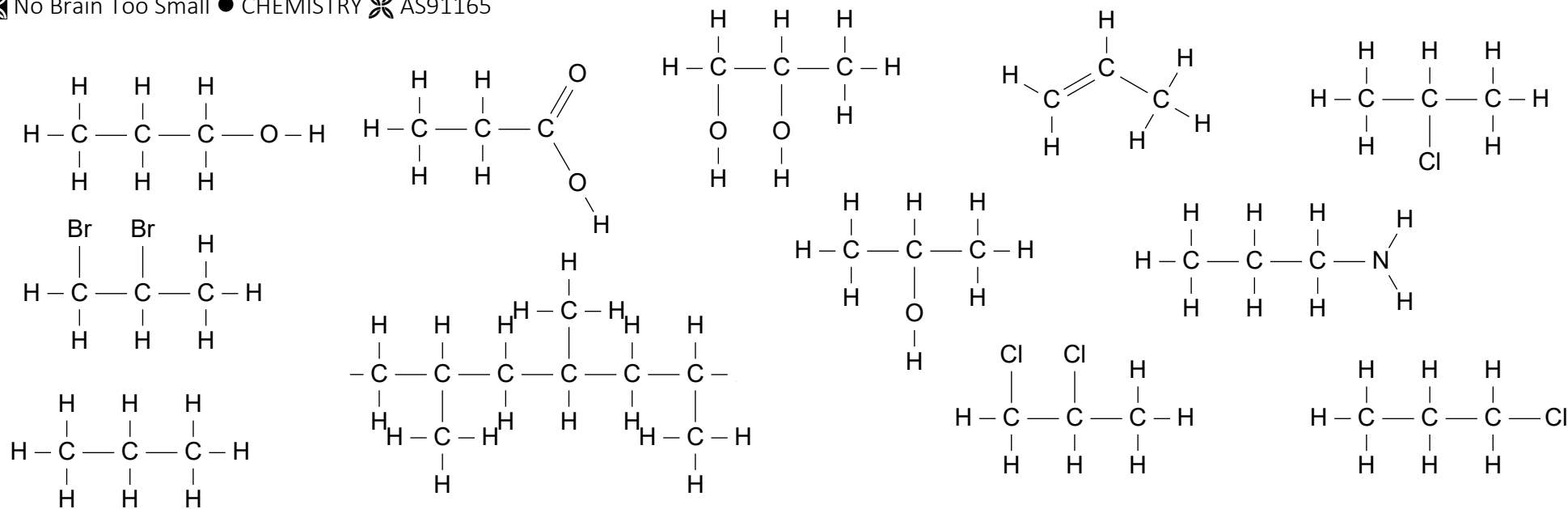


PROPENE Place the structural formulae and/or names in the boxes; Place the reagents and conditions and/or the name of the type of reaction occurring over the ☺ face.

* when you draw a product for the monosubstitution reaction it doesn't matter where you put the one -Cl; the major & minor here refer to the addition reaction





$\text{H}^+/\text{MnO}_4^-$

$\text{H}^+/\text{Cr}_2\text{O}_7^{2-}$,
heat *

SOCl_2

KOH (alc)

KOH (aq)

Cl_2

C_3H_6 , heat &
catalyst

Br_2

HCl

Cl_2 , UV and/or
heat

$\text{H}^+/\text{H}_2\text{O}$

Conc. H_2SO_4

NH_3 (alc)

H_2 , Ni catalyst

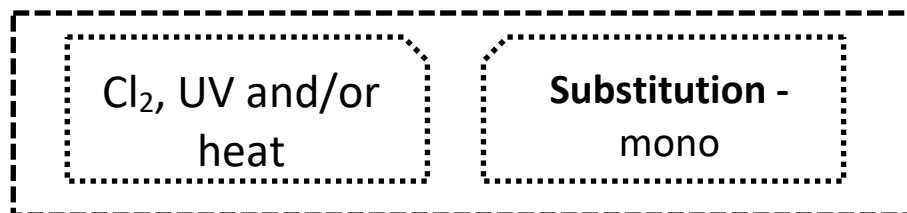
$\text{H}^+/\text{MnO}_4^-$,
heat *

propanoic acid	propane	propan-1-ol 1-propanol	propan-2-ol 2-propanol
1-aminopropane	1-chloropropane	1,2-di chloropropane	2-chloropropane
polypropene	propan-1,2-diol	propene	1,2-di bromopropane

propanoic acid	propane	propan-1-ol (or 1-propanol)	propan-2-ol (or 2-propanol)	1-chloro propane
1,2-dibromo propane	2-chloro propane	propan-1,2-diol	propene	
polypropene		1,2-dichloro propane	1-aminopropane	

You could draw the structural formulae for these on the back of these cards.

These can be cut out and glued to the back of the corresponding reaction conditions, e.g.



Addition - halogenation

Addition - hydro halogenation

Addition - hydrogenation

Addition - hydration

Addition - polymerisation

Oxidation

Oxidation

Substitution

Addition - halogenation

Substitution - mono

Oxidation

Elimination - dehydration

Substitution

Elimination

Substitution